

### Firmware Engineer

We are seeking a Firmware Engineer to join our growing R&D firmware team. Depending on the candidates experience and aptitude, the role will carry with it significant responsibility. The candidate will design, develop and test firmware for downhole and surface tools. They will be responsible for the full firmware development life-cycle.

We develop all of our firmware in-house. Key factors in the design and development of the firmware are:

- Low Power – most of our tools are battery operated.
- Safe failure modes – tools are run at extreme temperatures and experience significant mechanical strain. This environment can cause unpredictable failures. If a tool fails, it is essential that it doesn't affect any other tools around it.
- Build on existing communication protocols and design methodologies to ensure that new tools easily interface with the existing tool suite.
- Innovative design – we are leaders in our field and need to continuously improve our products to ensure that they remain ahead of the competition.

### Required Skills and Experience:

- All levels of industry experience will be considered – this includes candidates at a junior and senior level. We are recruiting for the right person, rather than requiring a prescribed amount of experience.
- Experience with writing embedded C code on 8/16 bit microcontrollers. At least 3 years commercial experience would be ideal, however outstanding candidates with less experience will be considered.
- Have completed complex coding projects in the past and can show an example of this.
- A good understanding of the unique requirements and pitfalls experienced when designing code for microcontrollers, especially considering the conditions that Metrol tools are subject to.
- Reasonable understanding of digital electronics and to a lesser degree analogue electronics. This includes following circuit diagrams and usage of tools such as oscilloscopes and the like.
- Familiarity with software design concepts and practices. This includes usage of source control, issue tracking systems and managing software releases.
- Lateral thinking. Having the ability to come up with unusual solutions to design challenges that have significant advantages over conventional designs.
- Custom algorithm design. Good at mathematics.
- Teamwork. Enjoys working as part of a small design team of experts.
- Communicates well cross-functionally with their peers. This includes firmware support to other engineers, technicians, and field staff.
- Is pro-active and takes ownership of their projects and drives them to completion. Is capable of juggling the pressures of tight delivery times and managing to keep focus on the high priority items.
- Must be able to communicate well in written and spoken English.
- Degree qualified in engineering, physics, computer science, mathematics or similar.

**Location:**

Kirkhill Estate, Dyce, Aberdeen.

**Salary:**

Negotiable.

Support for continuing career development may be available.

Apply by email [only](mailto:Vacancies-Technical@metrol.co.uk) with your full CV to [Vacancies-Technical@metrol.co.uk](mailto:Vacancies-Technical@metrol.co.uk)